

DIGLOTTA LEGNERI, A NEW SEASHORE BEETLE FROM
CALIFORNIA (COLEOPTERA: STAPHYLINIDAE)

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ABSTRACT

Species of the genus *Diglossa* are not constant in number of tarsomeres. The two California species have a tarsal formula of 4, 4, 5. The two European species have a tarsal formula of 4, 4, 4. *D. legneri*, new species, is described from California and Baja California Norte, Mexico. New locality records are listed for *D. pacifica*.

Diglossa Champion is a very distinctive genus of the family Staphylinidae. It is placed in the subfamily Aleocharinae because the antennal fossae are located on the surface of the head proximal to the eye near a line drawn through the anterior margin of the eyes. The mouthparts differ from those of most other members of the subfamily in that they are exceptionally long and slender. This is particularly true of the maxillary and labial palpi. As a consequence, *Diglossa* has been placed in a tribe by itself, Diglossini.

All members of this genus are restricted to the seashore, where they are found in sand or in wrack. Moore (1975) reported *D. pacifica* Fenyès as nocturnal on sandy beaches.

The type species, *Diglossa mersa* Haliday, was described from England in 1837. It and *D. submarina* Fairmaire and Laboulbène occur on the seashores of northwestern Europe. Three other species are known from the area of the Red Sea, one from Singapore, one from Celebes, one from New Jersey, and, including the new species described in this paper, two from California.

The tarsi of members of this genus are reported to be four-segmented on all legs. We have seen specimens of *Diglossa mersa* and *D. submarina* and have been able to verify that all the tarsi are distinctly four-segmented. However, both *D. pacifica* and *D. legneri*, new species from southern California, have the anterior and middle tarsi four-segmented and the posterior tarsi distinctly five-segmented. It is of interest in this regard that one other genus of marine Staphylinidae, *Diaulota*, displays considerable variation in tarsal segmentation. This was remarked on by Chamberlin and Ferris (1929) and discussed by Sawada (1971). Sawada said about *Diaulota*, "Thirdly and most strikingly the number of tarsal segments is not fixed, but differs from species to species. The number of tarsal segments is regarded as the most fundamental and standard character in the taxonomy of Aleocharinae and this is true of almost all forms known to us. But in the present genus it is quite floating; for instance it is 4, 4, 5 in *D. densissima*, as typical of the tribe Phytosi, while it is 4, 4, 4 in *D. aokii* sp. n. and 3, 3, 4 in *D. pacifica* sp. n., although there exists no fundamental difference in other characters between them."

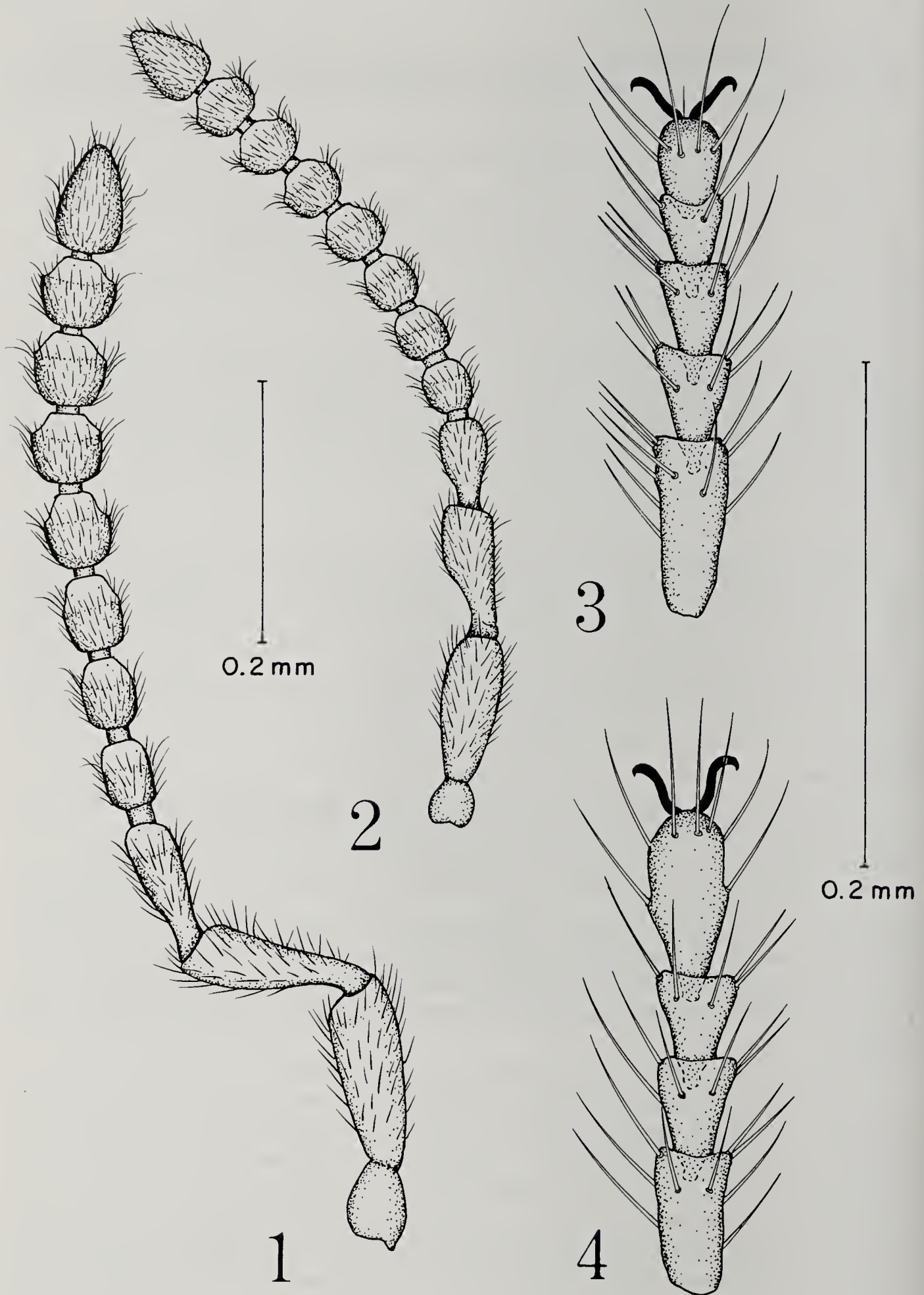


Fig. 1, *Diglotta legneri* n. sp. Left antenna of La Jolla, California, para-type.

Fig. 2, *D. pacifica* Fenyès. Left antenna of specimen from Refugio State Beach, Santa Barbara County, California.

Fig. 3, *D. pacifica* Fenyès. Right posterior tarsus of specimen from Refugio State Beach, Santa Barbara County, California.

Fig. 4, *D. mersa* Haliday. Right posterior tarsus of specimen from Europe, Bernhauser collection.

Now we have members of another genus, not closely related to *Diaulota*, but living in a similar marine habitat, whose tarsal segmentation is variable. When Fenyes (1921) described *Diglotta pacifica*, he overlooked the fact that the posterior tarsi were five-segmented.

Both of the California species of *Diglotta* differ from the two European species not only in tarsal segmentation but also in length of elytra. In the California species each elytron is not longer than wide; whereas in the two European species each elytron is distinctly longer than wide. We have not examined members of the New Jersey species nor of the five Asiatic species.

Diglotta legneri Moore and Orth, **new species**

Description of holotype, sex undetermined. Apterous, subopaque, with sparse pale pubescence. Largely piceous with the appendages paler.

Antenna hardly incrassate. First two segments elongate, of about equal length; third segment shorter but more than twice as long as wide; segments four through six of about equal length, each distinctly longer than wide; seventh through tenth each just noticeably wider than preceding, tenth very slightly wider than long; eleventh distinctly longer than wide. *Head* globose, as wide as pronotum; sparsely punctured and reticulate. Eye shorter than tempora. *Pronotum* with apex about as wide as the head, sides rapidly narrowed to base which is less than half as wide as apex. Punctuation and ground sculpture similar to that of head. *Elytra* narrow at base, rapidly expanded behind, apices truncate, conjointly almost as wide as pronotum. Each elytron about as long as wide. Sculpture similar to that of pronotum. *Abdomen* gradually wider to fourth visible segment, sparsely finely punctured and pubescent. *Length* 2.6 mm.

Holotype, La Jolla, San Diego County, California, 7 October 1953, in wrack, Ian Moore collector.

Paratypes, 2 spms. same data as holotype; 1 spm. La Jolla, San Diego County, California, 5 October 1953, Ian Moore collector; 1 spm. Rincon Beach, Ventura County, California, 10 October 1953, Ian Moore collector; 1 spm. 1.6 mi. W. Bolinas, Marin County, California, surf saturation zone on beach, 4 July 1974, Vincent Lee collector.

Disposition of types. The holotype and four paratypes are deposited in the collection of the Entomology Research Institute of Canada, Ottawa; one paratype in California Academy of Science; one paratype in the collection of the University of California at Riverside.

This species is named for E. F. Legner, Division of Biological Control, University of California, Riverside.

Diglotta legneri differs from *D. pacifica* in its larger size, 2.6 mm for the former and 1.5 mm for the latter; and particularly in its more slender antennae. In *D. legneri*, the fourth antennomere is almost one-third longer than wide; in *D. pacifica* it is as long as wide. In *D. legneri*, the tenth antennomere is hardly wider than long; in *D. pacifica* it is one-third wider than long.

Diglotta pacifica Fenyes

This species appears to be more common than *Diglotta legneri*. It was described from the beach south of Coronado, San Diego, California. Besides the holotype, we have seen the following material: 61 spms. Estero Bay, San Luis Obispo County, California, 6 inch deep core samples of sand on beach, site B, February, 1974, Dale Straughan collector; 17 spms. Refugio State Beach, Santa Barbara County, California, 17 January, 1977, R. E. Orth

Table 1. Relative length/width of antennal segments of California species of *Diglotta*. One hundred units = 0.26 mm.

Antennal Segments	<u>D. legneri</u> (Paratype, La Jolla)	<u>D. pacifica</u> (Refugio State Beach)
1	55/20	40/16
2	48/17	33/15
3	33/15	23/12
4	20/15	14/14
5	20/16	15/15
6	20/17	15/15
7	21/19	15/18
8	20/20	15/19
9	20/21	15/20
10	19/23	15/20
11	30/20	25/18

collector; 2 spms. same data, 7 February, 1977. 11 spms. Playa del Rey, Los Angeles County, California, on damp sand on beach, November, 1924, P. Timberlake collector; 3 spms. La Misión de San Miguel, Baja California Norte, México, 27 June 1959, Ian Moore collector; 2 spms. Estero Beach, Baja California Norte, México, 12 April 1959 and 1 June 1959, Ian Moore collector.

ACKNOWLEDGMENTS

Our thanks go to J. M. Campbell, Biosystematics Research Institute of Canada, Ottawa; H. Dybas, Field Museum of Natural History, Chicago; D. H. Kavanaugh, California Academy of Sciences, San Francisco; and E. Smith, Field Museum of Natural History, Chicago for loan of material and other favors.

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